

Abstract

[0043] An assembly having a retaining element, an outer race of a constant velocity joint, and a shaft of an outboard drive axle that is axially joined to the outer race. The shaft has an external groove circumferentially formed on its external surface for receiving the retaining element. The external surface of the shaft supports a new generation wheel bearing assembly and a wheel hub that is non-rotatably coupled to the external surface of the shaft. The retaining element engages the external groove of the shaft and retains the wheel hub without requiring a preload on the bearing. The wheel hub is held in place by the retaining element and the shaft, wherein the wheel bearing assembly is retained by the wheel hub, thereby allowing the retained wheel hub to be rotatably drivable within the wheel bearing assembly by the constant velocity joint.